The Science of the Total Environment, 86 (1989) 306–307
Elsevier Science Publishers B.V., Amsterdam — Printed in The Netherlands

Contents

VOLUME 86 (1989)

(Abstracted/Indexed in: Biol. Abstr., Chem. Abstr., Curr. Contents AB & ES, Environ. Period. Bibliogr., Excerpta Med., Geo Abstr., Oceanogr. Lit. Rev., PASCAL/CNRS, Selected Water Resour. Abstr.)

Special Issue: The Chromium Paradox in Modern Life: A Collection of Papers Presented at a Symposium Sponsored by the Association of Government Toxicologists held at the National Academy of Medicine, Bethesda, MD, U.S.A., 23–24 May 1988

Preface ix

Introductory address to the Symposium
H. Salem (Aberdeen, MD, U.S.A.) 1
Current carcinogen perspectives: De minimis, Delaney and decisions
E.K. Weisburger (Bethesda, MD, U.S.A.) 5
Environmental chemistry of chromium
D. Rai, L.E. Eary and J.M. Zachara (Richland, WA, U.S.A.) 15
Kinetics of chromium transformations in the environment
F.Y. Saleh, T.F. Parkerton, R.V. Lewis, J.H. Huang and K.L. Dickson (Denton, TX, U.S.A.) 25
Development of the revised drinking water standard for chromium
S. Goldhaber and C. Vogt (Washington, DC, U.S.A.) 43
Inorganic chemistry of chromium and its speciation in Whetlerite
S.A. Katz (Camden, NJ, U.S.A.) and H. Salem (Aberdeen, MD, U.S.A.) 53
Speciation, bioavailability, and systemic distribution of chromium from Whetlerite dust
H. Salem (Aberdeen, MD, U.S.A.) and S.A. Katz (Camden, NJ, U.S.A.) 59
Analytical chemistry of chromium
C. Veillon (Beltsville, MD, U.S.A.) 65
Nutritional chemistry of chromium
G.V. Iyengar (Gaithersburg, MD, U.S.A.) 69
Essentiality of chromium in humans
R.A. Anderson (Beltsville, MD, U.S.A.) 75
Inhalation toxicity of chromium dioxide dust to rats after two years exposure
K.P. Lee (Newark, DE, U.S.A.), C.E. Ulrich, R.G. Geil (Mattawan, MI, U.S.A.) and H.J. Trochimowicz (Newark, DE, U.S.A.) 83
Carcinogenic risk assessment criteria associated with inhalation of airborne particulates containing chromium(VI/III)
S.L. Friess (Arlington, VA, U.S.A.) 109
Molecular basis of hexavalent chromium carcinogenicity: Effect on gene expression
K.E. Wetterhahn and J.W. Hamilton (Hanover, NH, U.S.A.) 113
Mutagenicity and disposition of chromium
C.M. Witmer, H.-S Park (New Brunswick, NJ, U.S.A.) and S.I. Shupack (Villanova, PA, U.S.A.) 131
Acute and chronic systemic chromium toxicity
S.C. Gad (Skokie, IL, U.S.A.) 149

Chromium carcinogenicity: California strategies
G.V. Alexeeff, K. Satin, P. Painter, L. Zeise (Berkeley, CA, U.S.A.), C. Popejoy and G. Murchison (Sacramento, CA, U.S.A.) 159
Role of epidemiologic studies in evaluating the carcinogenicity of chromium compounds
J.A. Hathaway (Princeton, NJ, U.S.A.) 169
Evaluation of issues relating to the carcinogen risk assessment of chromium
H. Gibb and C. Chen (Washington, DC, U.S.A.) 181
Chromium and regulation: Bits and pieces
J.R. Beall (Germantown, MD, U.S.A.) 187
Recapitulation
W.E. Rinehart (Mendham, NJ, U.S.A.) 191
Questions and answers 195

Regular Papers

Modeling solute transport in soils in the presence of dissolved humic substances
P. Lafrance, O. Banton, P.G.C. Campbell and J.-P. Villeneuve (Sainte-Foy, Que., Canada) 207
Influence of Venice Lagoon macrofauna on nutrient exchange at the sediment–water interface
R. Donazzolo (Venice, Italy), D. Degobbis (Rovinj, Yugoslavia), A. Sfriso, B. Pavoni and A.A. Orio (Venice, Italy) 223
Sources of elements in cedar bark collected near a highway (Japan)
M. Tsurumi (Yokohama, Japan) 239
Haze and its relation to atmospheric accumulation aerosol
A. Berner (Vienna, Austria) 251
L'influence du vent et de la temperature sur les concentrations en Pb dans l'air urbain. I. Cas d'un site situe sous l'influence directe du trafic intense
S. Hallez, L. Thiessen, A. Derouane et G. Verduyn (Brussels, Belgium) 265
Organochlorine compounds and PCB congeners in contaminated sediments
B. Larsen (Ispra, Italy) and K. Fytianos (Thessaloniki, Greece) 273
Contamination of bovine (buffalo, *Bubalus bubalis* (L.)) milk from indoor use of DDT and HCH in malaria control programmes
R.S. Battu, P.P. Singh, B.S. Joia and R.L. Kalra (Ludhiana, India) 281
Use of *Polytrichum formosum* (moss) as a passive biomonitor for heavy metal pollution (cadmium, copper, lead and zinc)
B. Markert and V. Weckert (Osnabrück, F.R.G.) 289

Book Reviews 295
News Section 298
Announcements 303
Author Index 304

Subject Index 305